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**United States Patent and Trademark  
Scientific and Technical Information Center  
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## **FAX TRANSMISSION COVER SHEET**

DATE: 09/26/2006

Total Number of Pages Faxed: 6

**TO:**

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**ORG.:** \_\_\_\_\_

**FAX NUMBER:** 571-273-0459

**FROM:** Mark Spencer  
**Voice Ph. Number:** (571)272-2510  
**FAX Ph. Number:** (571)273-0221

### **Message:**

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/526,127 A  
Source: PCT  
Date Processed by STIC: 09/26/2006

# ENTERED



PCT

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/526,127A

DATE: 09/26/2006  
TIME: 15:07:49

Input Set : A:\11656610.APP  
Output Set: N:\CRF4\09222006\J526127A.raw

3 <110> APPLICANT: NOVARTIS AG  
4 NOVARTIS PHARMA GMBH  
6 <120> TITLE OF INVENTION: OCULAR GENE THERAPY  
8 <130> FILE REFERENCE: 116566-010  
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/526,127A  
C--> 11 <141> CURRENT FILING DATE: 2005-02-28  
13 <150> PRIOR APPLICATION NUMBER: PCT/EP03/09497  
14 <151> PRIOR FILING DATE: 2003-08-27  
16 <150> PRIOR APPLICATION NUMBER: 60/406,470  
17 <151> PRIOR FILING DATE: 2002-08-26  
19 <160> NUMBER OF SEQ ID NOS: 25  
21 <170> SOFTWARE: PatentIn Ver. 3.3  
23 <210> SEQ ID NO: 1  
24 <211> LENGTH: 183  
25 <212> TYPE: PRT  
26 <213> ORGANISM: Homo sapiens  
28 <400> SEQUENCE: 1  
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30 1 5 10 15  
32 Ser Pro Leu Ser Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln  
33 20 25 30  
35 Cys Phe Gln Gln Ala Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala  
36 35 40 45  
38 Phe Leu Ser Ser Arg Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala  
39 50 55 60  
41 Asp Arg Ala Ala Val Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe  
42 65 70 75 80  
44 Pro Ser Trp Glu Ala Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro  
45 85 90 95  
47 Gly Ala Arg Ile Phe Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro  
48 100 105 110  
50 Thr Trp Pro Gln Lys Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg  
51 115 120 125  
53 Arg Leu Thr Glu Ser Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser  
54 130 135 140  
56 Ala Thr Gly Gln Ala Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln  
57 145 150 155 160  
59 Ser Ala Ala Ser Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn  
60 165 170 175  
62 Ser Phe Met Thr Ala Ser Lys  
63 180  
66 <210> SEQ ID NO: 2  
67 <211> LENGTH: 551

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DATE: 09/26/2006  
TIME: 15:07:49

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68 <212> TYPE: DNA  
69 <213> ORGANISM: Homo sapiens  
71 <400> SEQUENCE: 2  
72 acagccacccg cgacttccag ccgggtgcgtcc acctggttgc gctcaaacagc cccctgtcag 60  
73 gggcatgcg gggcatccgc gggccgcact tccagtgctt ccaggcaggcg cggggccgtgg 120  
74 ggctggcgaa caccctccgc gccttcgttgc ctccgcgcct gcaggacctg tacagcatcg 180  
75 tgccgcgtgc cgaccgcgca gcrtgtggca tcgtcaacact caaggacggag ctgtgtttc 240  
76 ccagctggga ggctctgttc tcaggctctg agggtccgct gaagccccggg geacgcattt 300  
77 tctcttttga cggcaaggac gtccgtggac acccccacctg gccccagaag agcgtgtggc 360  
78 atggctcgaa ccccaacggg cggcggatcg cggagagacta ctgtgagacg tggcggacgg 420  
79 aggctccctc ggccacgggc caggcctctt cgtgtgtggg gggcaggctc ctggggcaga 480  
80 gtgccgcgag ctgccatcac gcctacatcg tgctctgtat tgagaacagc ttcatgactg 540  
81 cttccaagta 551  
84 <210> SEQ ID NO: 3  
85 <211> LENGTH: 207  
86 <212> TYPE: PRT  
87 <213> ORGANISM: Mus musculus  
89 <400> SEQUENCE: 3  
90 Met Glu Thr Asp Thr Leu Leu Ieu Trp Val Leu Leu Leu Trp Val Pro  
91 1 5 10 15  
93 Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val  
94 20 25 30  
96 Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly  
97 35 40 45  
99 Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly  
100 50 55 60  
102 Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu  
103 65 70 75 80  
105 Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn  
106 85 90 95  
108 Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly  
109 100 105 110  
111 Ser Gln Gly Gln Leu Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly  
112 115 120 125  
114 Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His  
115 130 135 140  
117 Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr  
118 145 150 155 160  
120 Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu  
121 165 170 175  
123 Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr  
124 180 185 190  
126 Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys  
127 195 200 205  
130 <210> SEQ ID NO: 4  
131 <211> LENGTH: 624  
132 <212> TYPE: DNA  
133 <213> ORGANISM: Mus musculus  
135 <400> SEQUENCE: 4

RAW SEQUENCE LISTING  
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Input Set : A:\11656610.APP  
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136 atggagacag acacactcct gctatggta ctgctgtct gggttccagg ttcactgg 60  
137 gacgcggccc atactcatca ggactttcag ccagtgtcc acctgggtgc actgaacacc 120  
138 cccctgtctg gaggcatcg tggtatccgt ggagcagatt tccagtgtt ccagcaagcc 180  
139 cgagccgtgg ggctgtcggg caccttccgg gcttcttgtt cctcttaggt gcaggatctc 240  
140 tatagcatcg tgccgcgtgc tgaccgggg tctgtgcccc tcgtcaacct gaaggacgag 300  
141 gtgttatctc ccagctggga ctccctgttt tctggctccc agggtcaagt gcaaccggg 360  
142 gcccgcatct ttcttttga cggcagagat gtcctgagac acccagctg gccgcagaag 420  
143 agcgtatggc acggctcggg ccccagtggg cggaggctga tggagagttt ctgtgagaca 480  
144 tggcgaactg aaactactgg ggctacaggt caggcctctt ccctgtgtc aggaggotc 540  
145 ctgaaacaga aagctgagag ctgccacaac agctacateg tcctgtgtcat tgagaatagc 600  
146 ttcatgaccc ttctctccaa atag 624  
149 <210> SEQ ID NO: 5  
150 <211> LENGTH: 8  
151 <212> TYPE: PRT  
152 <213> ORGANISM: Homo sapiens  
154 <400> SEQUENCE: 5  
155 Ala Pro Gln Gln Glu Ala Leu Ala  
156 1 5  
159 <210> SEQ ID NO: 6  
160 <211> LENGTH: 38  
161 <212> TYPE: DNA  
162 <213> ORGANISM: Artificial Sequence  
164 <220> FEATURE:  
165 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
166 primer  
168 <400> SEQUENCE: 6  
169 actggtgacg cggccatac tcatcaggac tttcagcc 38  
172 <210> SEQ ID NO: 7  
173 <211> LENGTH: 32  
174 <212> TYPE: DNA  
175 <213> ORGANISM: Artificial Sequence  
177 <220> FEATURE:  
178 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
179 primer  
181 <400> SEQUENCE: 7  
182 aagggtatc gatctagctg gcagaggctt at 32  
185 <210> SEQ ID NO: 8  
186 <211> LENGTH: 20  
187 <212> TYPE: DNA  
188 <213> ORGANISM: Artificial Sequence  
190 <220> FEATURE:  
191 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
192 primer  
194 <400> SEQUENCE: 8  
195 cactgcttac tggcttatacg 20  
198 <210> SEQ ID NO: 9  
199 <211> LENGTH: 29  
200 <212> TYPE: DNA  
201 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING  
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TIME: 15:07:49

Input Set : A:\11656610.APP  
Output Set: N:\CRF4\09222006\J526127A.raw

203 <220> FEATURE:  
204 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
205 primer  
207 <400> SEQUENCE: 9 29  
208 ctgatgagta tggccgcgt caccagtgg  
211 <210> SEQ ID NO: 10  
212 <211> LENGTH: 32  
213 <212> TYPE: DNA  
214 <213> ORGANISM: Artificial Sequence  
216 <220> FEATURE:  
217 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
218 primer  
220 <400> SEQUENCE: 10 32  
221 aagggctata gatcttagctg gcagaggcct at  
224 <210> SEQ ID NO: 11  
225 <211> LENGTH: 35  
226 <212> TYPE: DNA  
227 <213> ORGANISM: Artificial Sequence  
229 <220> FEATURE:  
230 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
231 primer  
233 <400> SEQUENCE: 11 35  
234 gatctctaga ccaccatgca tactcatcg gactt  
237 <210> SEQ ID NO: 12  
238 <211> LENGTH: 30  
239 <212> TYPE: DNA  
240 <213> ORGANISM: Artificial Sequence  
242 <220> FEATURE:  
243 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
244 primer  
246 <400> SEQUENCE: 12 30  
247 actggagaaa gaggtttatc tagctactag  
250 <210> SEQ ID NO: 13  
251 <211> LENGTH: 18  
252 <212> TYPE: PRT  
253 <213> ORGANISM: Adenovirus  
255 <400> SEQUENCE: 13  
256 Met Arg Tyr Met Ile Leu Gly Leu Leu Ala Leu Ala Ala Val Cys Ser 15  
257 1 5 10 15  
259 Ala Ala  
263 <210> SEQ ID NO: 14  
264 <211> LENGTH: 96  
265 <212> TYPE: DNA  
266 <213> ORGANISM: Artificial Sequence  
268 <220> FEATURE:  
269 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
270 primer  
272 <400> SEQUENCE: 14  
273 gatctctaga ccaccatgag gtacatgatt ttaggcttgc tcgccttgc ggcagtctgc 60

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/526,127A

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Input Set : A:\11656610.APP  
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274 agcgccggccc atactcatac tcatcaggac tttcag 96  
277 <210> SEQ ID NO: 15  
278 <211> LENGTH: 29  
279 <212> TYPE: DNA  
280 <213> ORGANISM: Artificial Sequence  
282 <220> FEATURE:  
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284 primer  
286 <400> SEQUENCE: 15 29  
287 atcgatcata ctcatcagga ctttcagcc  
290 <210> SEQ ID NO: 16  
291 <211> LENGTH: 29  
292 <212> TYPE: DNA  
293 <213> ORGANISM: Artificial Sequence  
295 <220> FEATURE:  
296 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
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299 <400> SEQUENCE: 16 29  
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303 <210> SEQ ID NO: 17  
304 <211> LENGTH: 23  
305 <212> TYPE: DNA  
306 <213> ORGANISM: Artificial Sequence  
308 <220> FEATURE:  
309 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
310 primer  
312 <400> SEQUENCE: 17 23  
313 ttttttttttc agtgtaaaag gtc  
316 <210> SEQ ID NO: 18  
317 <211> LENGTH: 19  
318 <212> TYPE: DNA  
319 <213> ORGANISM: Artificial Sequence  
321 <220> FEATURE:  
322 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
323 primer  
325 <400> SEQUENCE: 18 19  
326 cagatgacat cctggccag  
329 <210> SEQ ID NO: 19  
330 <211> LENGTH: 22  
331 <212> TYPE: DNA  
332 <213> ORGANISM: Artificial Sequence  
334 <220> FEATURE:  
335 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
336 primer  
338 <400> SEQUENCE: 19 22  
339 ctatacagga aagtatggca gc  
342 <210> SEQ ID NO: 20  
343 <211> LENGTH: 118  
344 <212> TYPE: DNA

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/526,127A

DATE: 09/26/2006

TIME: 15:07:50

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Output Set: N:\CRF4\09222006\J526127A.raw

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L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date